

ABSTRACT

The present invention relates to a method for fabricating a single crystal silicon thin film at the
5 desired location to the desired size from an amorphous or polycrystalline thin film on a substrate using laser irradiation and laser beam movement along the substrate having the semiconductor thin films being irradiated. This method comprises the steps of: forming a semiconductor layer
10 or a metal thin film on a transparent or semi-transparent substrate; forming a single crystal seed region on the substrate of the desired size by a crystallization method using laser irradiation; and converting the desired region of the semiconductor layer or metal thin film into a single
15 crystal region, using the single crystal seed region.